

**AMENDMENT UNDER 37 C.F.R. §1.111**  
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**AMENDMENTS TO THE DRAWINGS**

Please replace the two (2) sheets of drawings filed on November 8, 2005 (Figures 1-5) with the enclosed two (2) sheets of Replacement Drawings (Figures 1-5). No new matter is added by the enclosed Replacement Sheets.

Attachment: Replacement Sheets (2)

**REMARKS**

Claims 1-4 are all the claims currently pending in the application. By the current Amendment, Applicant is amending claims 1-3 and adding new claim 5.

**Preliminary Matters with Summary of Office Action**

In the non-final Office Action dated January 24, 2006, the Examiner has withdrawn the previous Office Action of November 30, 2005, which issued in accordance with the practice under *Ex parte Quayle*, and has reopened prosecution. A Statement of Substance of Interview, supplementing the Interview Summary provided by the Examiner and recording the substance of the interview that was conducted on January 17, 2006 and that led to withdrawal of the *Quayle* Action, is enclosed. In the January 24 non-final Office Action, the Examiner has rejected claims 1-4 under 35 U.S.C. §112, second paragraph, as being indefinite. As indicated on page 6 of the Office Action, the claims are considered allowable over the prior art currently of record.

In addition, the Examiner has objected to the Abstract and to the drawings filed on October 31, 2003

Finally, the Applicant thanks the Examiner for considering the references submitted in the Information Disclosure Statement of November 8, 2005, and for enclosing the initialed Form PTO/SB/08 with the *Quayle* Action.

**Applicant's Response to Objections and Rejections**

As shown in the amendments above, two sheets of replacement drawings are enclosed with the present Amendment. The replacement drawings are believed to resolve, in self-explanatory fashion, the objections raised on page 2 of the Office Action dated January 24, 2006.

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Applicant has reviewed the grounds for objection to the Abstract as well as the Abstract itself. The Abstract, as amended on November 8, 2005, and as shown in “clean” form on page 4 of the Preliminary Amendment filed on November 28, 2005, is well below 15 lines and/or 150 words in length, and conforms to MPEP §608.01(b) in all other apparent respects. Furthermore, the Office Action does not point with particularity to supposed nonconformities with traditional practice. Therefore, Applicant does not amend the Abstract at this time and requests the Examiner to reconsider the objection to the Abstract.

The Examiner has rejected claims 1-4 under 35 U.S.C. §112, second paragraph, as being indefinite. No other grounds of rejection are presented.

Claim 1 is herein amended in various respects. First, the embedded narrow range, which was placed in dependent claim 4 and was inadvertently retained in claim 1 by the Preliminary Amendment of November 8, 2005, has been deleted by the present Amendment from claim 1. In addition, claim 1 has been further amended to address various potential unclarities. Furthermore, Applicant is presenting a new independent claim 5, which is newly formulated based directly on the disclosure set forth in the specification.

Amended claim 1 recites that superimposition patterns are produced successively in time. In addition, these patterns are produced successively with respective phase shifts having predefined phase steps. These patterns result, respectively, from object wavefronts and reference wavefronts being superimposed. From the respective intensities of the superimposition patterns, phase differences between the object wavefronts on the one hand and the reference wavefronts on the other can be determined. In addition, superimposition pattern evaluation is used to

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determine phase shift errors in the successively produced patterns. These phase shift errors are used to correct the phase differences determined above.

Amended claim 2 recites that the object wavefronts and/or the reference wavefronts are produced using predefined phase jumps in a periodic structure. Exemplary embodiments are described with reference to Figs. 2-5, see, e.g., page 7, line 38, to page 10, line 25 of the specification.

In amended claim 3, the parenthetical reference numerals have been corrected, to agree with the specification description of the compensating correction contributions and the apodisation weights, see, e.g., page 10, line 27, to page 12, line 16 of the specification. The term 'apodisation weights' is discussed on the above-noted pages and is known in the art, see, e.g. page 1, line 22, to page 2, line 18, of the specification. As recited in claim 3 and as described by way of exemplary equations on the above-noted pages, the apodisation weights, with the compensating correction contributions determined, are used when using the phase shift errors to correct the phase differences.

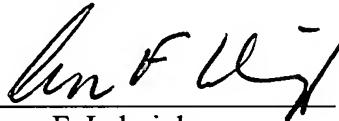
**Closing Remarks**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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